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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/942,504	08/29/2001	Shean-Guang Chang	BEAS-01063US1	9220

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EXAMINER

SHINGLES, KRISTIE D

ART UNIT	PAPER NUMBER
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2141

DATE MAILED: 02/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/942,504

Applicant(s)

CHANG ET AL.

Examiner

Kristie Shingles

Art Unit

2141

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 August 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 August 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                                    |                                                                             |
|----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____                                                |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>11/15/02</u> .                                                            | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

*Claims 1-24 are pending.*

### ***Priority***

1. Acknowledgment is made of applicant's claim for domestic priority under 35 U.S.C. 120. The certified copy has been filed in Provisional Application No. 60/305/985, filed on 7/16/2001.

### ***Information Disclosure Statement***

2. The information disclosure statement (IDS) submitted on 11/15/2002 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the Office. An initialed and dated copy of Applicant's IDS form 1449, is attached to the instant Office action.

### ***Drawings***

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: 128. Corrected drawing sheets, or amendment to the specification to add the reference character(s) in the description, are required in reply to the Office action to avoid abandonment of the application. Any amended replacement-drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the

Art Unit: 2141

examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-24 are rejected under 35 U.S.C. 102(e) as being anticipated by *Baum et al* (USPN 6,850,495).

a. Per claim 1, *Baum et al* teach a system for providing two qualities of service from a single data stream, comprising:

- (a) a storage space for storing at least one of a first quality of service choice and a second quality of service choice for each of a plurality of users (**Figures 29 & 30, col.19 line 25-col.20 line 21 and col.23 lines 25-60; lookup table stores context information pertaining to each customer indicating each customer's specific quality of service profile**);
- (b) a processor programmed to direct the data stream for each user according to that user's quality of service choice (**col.20 lines 25-40, col.23 lines 5-60 and col.24 lines 28-63; processor is used with access router to transmit data to the prospective customer according to the customer's specified quality of service**);
- (c) multicasting apparatus for receiving the data stream from the processor and multicasting the data stream to each user for which the first quality of service choice is stored in said storage space (**col.12 line 15-col.13 line 3, col.19 line 15-**

**col.20 line 40, col.22 lines 10-64 and col.23 lines 5-60; access router functions as the multicasting apparatus that operates in conjunction with the processor to transmit data according to the customer's quality of service profile maintained in the lookup table list); and**

- (d) a point-to-point device for receiving the data stream from the processor and ensuring that each user for which the second quality of service is stored in said storage space receives the data stream (**col.7 line 60-col.9 line 17, col.11 line 57-col.12 line 7, col.15 lines 38-46, col.16 line 57-col.17 line 15 and col.19 line 25-col.20 line 21; the aggregation unit and router operate together for addressing the appropriate quality of service data to the appropriate client according to the context information stored in the lookup table).**

b. **Claims 8, 15 and 21-24** contain limitations that are substantially equivalent to claim 1 and are therefore rejected under the same basis.

c. **Per claim 2, *Baum et al* teach the system according to claim 1, further comprising a listener adapted to listen for information sent in the data stream to one of the users of the system (col.8 line 64-col.9 line 6, col.12 lines 23-53, col.13 line 66-col.14 line 45, col.20 lines 25-40, col.22 line 30-col.23 line 20, col.25 line 64-col.26 line 14 and col.28 lines 40-51; multicast group monitoring process functions as a listener for transmitting the monitored data to the multicast groups).**

d. **Claims 10 and 17** are substantially similar to claim 2 and are therefore rejected under the same basis.

e. **Per claim 3, *Baum et al* teach the system according to claim 1, further comprising a single API for providing instructions to the processor for both qualities of service (Figures 11, 17 & 18, col.1 line 60-col.2 line 54, col.6 line 45-col.7 line 16, col.8 lines 35-63, col.13 line 5-col.14 line 45 and col.18 line 35-col.19 line 14; provision for application and network interfaces).**

f. **Per claim 4, *Baum et al* teach the system according to claim 1, further comprising a thread of execution for each user selecting the multicast quality of service, the thread of execution listening on the user's behalf for a message on the multicast stream then delivering the message to the user (col.8 line 64-col.9 line 6, col.12 lines 23-53, col.13 line 66-col.14 line 45, col.15 lines 19-46, col.16 line 55-col.17 line 15, col.20 lines 25-40, col.22 line 30-col.23 line 20, col.25 line 64-col.26 line 14 and col.28 lines 40-51; customers may select their quality/class of service with provisions for listening and monitoring for activity and data transmissions to the customers).**

g. **Per claim 5, *Baum et al* teach the system according to claim 1, further comprising a queue for each listener, allowing a user to receive messages for both qualities of service (col.11 line 58-col.12 line 7, col.19 line 56-col.20 line 21, col.25 line 43-col.26 line 16 and col.27 line 35-col.28 line 34; provision for queues allowing customers with multiple devices and more than one quality of service type).**

h. **Claims 11 and 18 are substantially equivalent to claim 5 and are therefore rejected under the same basis.**

i. **Per claim 6, *Baum et al* teach the system according to claim 1, wherein said storage space may store separate choices for each user for multiple data streams (Figures 29 & 30, col.12 lines 15-53, col.18 line 35-col.19 line 10, col.19 line 25-col.20 line 21 and col.23 lines 25-60; lookup table stores context information pertaining to each customer indicating each customer's specific quality of service profile, wherein table listings maintain data partitioning—separate storage spaces—among the various choices and parameters).**

Art Unit: 2141

j. **Per claim 7, *Baum et al* teach the system according to claim 1, further comprising a filtering device allowing a user to filter out certain messages in the data stream (col.11 line 65-col.12 line 7, col.22 lines 10-64, col.23 lines 25-60, col.25 line 10-col.26 line 16 and col.26 line 56-col.27 line 42; provision for filtering via a firewall or in conjunction with the access router).**

k. **Claims 9, 14 and 16 are substantially equivalent to claim 7 and are therefore rejected under the same basis.**

l. **Per claim 12, *Baum et al* teach the method according to claim 8, further comprising the step of tagging each message with a sequence number so that a user can tell if a message has been missed (col.2 lines 25-45, col.3 line 66-col.4 line 16 and col.5 line 5-col.6 line 9; frame check sequence numbers are applied to the data segments to detect errors and to assure the proper sequencing of the data segments).**

m. **Claim 19 is substantially equivalent to claim 12 and is therefore rejected under the same basis.**

n. **Per claim 13, *Baum et al* teach the method according to claim 8, further comprising the step of tagging each message so that a user can tell the data stream from which the message was received (col.17 lines 20-62, col.19 line 16-col.20 line 21 and col.23 line 25-col.24 line 12; tag identifiers and bits are used for conveying routing data and customer's quality/class of service).**

o. **Claim 20 is substantially equivalent to claim 13 and is therefore rejected under the same basis.**

### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. *Mohaban et al* (USPN 6,463,470) disclose a method and apparatus of storing policies for policy-based management of quality of service treatments of network data traffic flows.
- b. *Vaid et al* (USPN 6,047,322) disclose a method and apparatus for quality of service management.
- c. *McCloghrie et al* (USPN 6,286,052) disclose a method and apparatus for identifying network data traffic flows and for applying quality of service treatments to the flows.
- d. *Kilkki et al* (USPN 6,549,938) disclose a system and method for prioritizing multicast packets in a network service class utilizing a priority-based quality of service.
- e. *Bushmitch* (USPN 5,928,331) discloses a distributed Internet Protocol-based real-time multimedia streaming architecture.
- f. *Farinacci et al* (USPN 5,519,704) disclose a reliable transport protocol for internetwork routing.
- g. *Hodgkinson et al* (USPN 6,163,807) disclose a packet network.
- h. *Kawarai et al* (US 20010033581) disclose a packet switch, scheduling device, drop control circuit, multicast control circuit and QoS control device.
- i. *Pung et al* (US 20020150099) disclose a multicast routing method satisfying quality of service constraints, software and devices.
- j. *Mudhar et al* (US 20030076854) disclose a communications network.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kristie Shingles whose telephone number is 571-272-3888. The examiner can normally be reached on Monday-Friday 8:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia can be reached on 571-272-3880. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

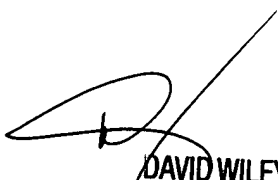


Art Unit: 2141

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Kristie Shingles  
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